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CLAIMS

1. A method, comprising:
providing an InfiniBand architecture subnet having a plurality of subnet managers;
5 one of the plurality of subnet managers assuming a master subnet manager
function; and
computing derived database elements independent of which of the plurality of
subnet managers assumes the master subnet manager function.

10 2. The method of claim 1, wherein computing comprises the master subnet
manager function computing the derived database elements.

3. The method of claim 1, wherein the derived database elements computed are
identical regardless of which of the plurality of subnet managers assumes the master
15 subnet manager function.

4. The method of claim 1, wherein computing comprises computing the derived
database elements deterministically regardless of which of the plurality of subnet
managers assumes the master subnet manager function.

20 5. The method of claim 1, further comprising the master subnet manager function
initializing the InfiniBand architecture subnet utilizing the derived database elements.

6. The method of claim 1, further comprising:
25 creating a replicated set of database elements at a standby subnet manager;
the standby subnet manager assuming the master subnet manager function;
the master subnet manager function computing the derived database elements; and
the master subnet manager using the replicated set of the database elements and the
derived database elements to initialize the InfiniBand architecture subnet.

30 7. The method of claim 1, wherein the derived database elements comprises a
local identifier assignment.

8. The method of claim 1, wherein the derived database elements comprises a tree determination.

5 9. The method of claim 1, wherein the derived database elements comprises a forwarding table assignment.

10 10. The method of claim 9, wherein the forwarding table assignment can comprise at least one of a linear forwarding table assignment and a multicast forwarding table assignment.

11. An InfiniBand architecture node, comprising:
one of a plurality of subnet managers in an InfiniBand architecture subnet;
a master subnet manager function, wherein the master subnet manager function is
15. assumed by the one of the plurality of subnet managers; and
derived database elements, wherein the derived database elements are computed by the master subnet manager function, and wherein the derived database elements are computed independently of which of the plurality of subnet managers in the InfiniBand architecture subnet assumes the master subnet manager function.

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12. The InfiniBand architecture node of claim 11, wherein the derived database elements computed are identical regardless of which of the plurality of subnet managers assumes the master subnet manager function.

25 13. The InfiniBand architecture node of claim 11, wherein the derived database elements are computed computing deterministically regardless of which of the plurality of subnet managers assumes the master subnet manager function.

30 14. The InfiniBand architecture node of claim 11, further comprising the master subnet manager function initializing the InfiniBand architecture subnet utilizing the derived database elements.

15. The InfiniBand architecture node of claim 11, further comprising a replicated set of database elements, wherein the replicated set of database elements are created at the InfiniBand architecture node, and wherein the master subnet manager uses the replicated set of the database elements and the derived database elements to initialize the InfiniBand architecture subnet.

16. The InfiniBand architecture node of claim 11, wherein the derived database elements comprises a local identifier assignment.

17. The InfiniBand architecture node of claim 11, wherein the derived database elements comprises a tree determination.

18. The InfiniBand architecture node of claim 11, wherein the derived database elements comprises a forwarding table assignment.

19. The InfiniBand architecture node of claim 18, wherein the forwarding table assignment can comprise at least one of a linear forwarding table assignment and a multicast forwarding table assignment.

20. A computer-readable medium containing computer instructions for instructing a processor to perform a method of computing derived database elements in an InfiniBand architecture subnet, the instructions comprising:

providing a plurality of subnet managers in the InfiniBand architecture subnet;
one of the plurality of subnet managers assuming a master subnet manager

function; and

computing the derived database elements independent of which of the plurality of subnet managers assumes the master subnet manager function.

21. The computer-readable medium of claim 20, wherein computing comprises the master subnet manager function computing the derived database elements.

22. The computer-readable medium of claim 20, wherein the derived database elements computed are identical regardless of which of the plurality of subnet managers assumes the master subnet manager function.

5 23. The computer-readable medium of claim 20, wherein computing comprises computing the derived database elements deterministically regardless of which of the plurality of subnet managers assumes the master subnet manager function.

10 24. The computer-readable medium of claim 20, further comprising the master subnet manager function initializing the InfiniBand architecture subnet utilizing the derived database elements.

15 25. The computer-readable medium of claim 20, further comprising:
creating a replicated set of database elements at a standby subnet manager;
the standby subnet manager assuming the master subnet manager function;
the master subnet manager function computing the derived database elements; and
the master subnet manager using the replicated set of the database elements and the
derived database elements to initialize the InfiniBand architecture subnet.

20 26. The computer-readable medium of claim 20, wherein the derived database elements comprises a local identifier assignment.

25 27. The computer-readable medium of claim 20, wherein the derived database elements comprises a tree determination.

28. The computer-readable medium of claim 20, wherein the derived database elements comprises a forwarding table assignment.

30 29. The computer-readable medium of claim 28, wherein the forwarding table assignment can comprise at least one of a linear forwarding table assignment and a multicast forwarding table assignment.